

SEQUENCE LISTING

<110> Kiyosue, Yuko
Sasaki, Hiroyuki
Tsukita, Shoichiro
Eisai Co., Ltd.

<120> CULTURED XENOPUS LAEVIS CELL LINES
EXPRESSING MUTANT ADENOMATOUS POLYPOSIS COLI GENE

<130> 082368-002400US

<150> PCT/JP03/10434

<151> 2003-08-19

<150> JP 2002-241487

<151> 2002-08-22

<160> 9

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 2829

<212> PRT

<213> Xenopus laevis

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Asn	Ile	Pro	Ala	Gly	Lys	Ala	Arg	Pro	Lys	Met	Ser	Met	Arg	Ser	Tyr
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Gln	Leu	Gln	Asn	Leu	Thr	Lys	Arg	Ile	Asp	Ser	Leu	Pro	Leu	Thr	Glu
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Ala	Lys	Tyr	Lys	Asp	Ala	Asn	Ile	Met	Ser	Pro	Gly	Ser	Ser	Val	Pro	740	745	750
Ser	Leu	His	Val	Arg	Lys	Gln	Lys	Ala	Leu	Glu	Ala	Glu	Leu	Asp	Ala	755	760	765
Gln	His	Leu	Ser	Glu	Thr	Phe	Asp	Asn	Ile	Asp	Asn	Leu	Ser	Pro	Lys	770	775	780
Thr	Thr	His	Arg	Asn	Lys	Gln	Arg	His	Lys	Gln	Asn	Leu	Cys	Ser	Glu	785	790	795
Tyr	Ala	Leu	Asp	Ser	Ser	Arg	His	Asp	Asp	Ser	Ile	Cys	Arg	Ser	Asp	805	810	815
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Thr	Val	Leu	Pro	Gly	Ser	Ser	Ser	Pro	Arg	Pro	Thr	Met	Asp	Gly	Ser	835	840	845
Arg	Pro	Glu	Lys	Asp	Arg	Glu	Arg	Thr	Ala	Gly	Leu	Gly	Asn	Tyr	His	850	855	860
Ser	Thr	Thr	Glu	Ser	Ser	Gly	Asn	Ser	Ser	Lys	Arg	Ile	Gly	Ile	Gln	865	870	875
Leu	Ser	Thr	Thr	Ala	Gln	Ile	Ser	Lys	Val	Met	Asp	Glu	Val	Ser	Asn	885	890	895
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His	Cys	Met	Ser	Asp	Glu	Arg	Asn	Ser	Gln	Arg	Lys	Pro	Ser	Ser	Asn	915	920	925
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Asn	Asp	Ser	Leu	Asn	Ser	Val	Ser	Ser	Thr	Glu	Gly	Tyr	Gly	Lys	Arg	965	970	975
Gly	Gln	Val	Lys	Pro	Ser	Val	Glu	Ser	Tyr	Ser	Glu	Asp	Asp	Glu	Ser	980	985	990
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Gln	Ser	Ala	Asn	His	Met	Asp	Asp	Asn	Asp	Thr	Glu	Leu	Asp	Thr	Pro	1010	1015	1020
Ile	Asn	Tyr	Ser	Leu	Lys	Tyr	Ser	Asp	Glu	Gln	Leu	Asn	Ser	Gly	Arg	1025	1030	1035
Gln	Ser	Pro	Thr	Gln	Asn	Glu	Arg	Trp	Ser	Arg	Pro	Lys	His	Ile	Ile	1045	1050	1055
Asp	Ser	Glu	Met	Lys	Gln	Ser	Glu	Gln	Arg	Gln	Pro	Arg	Thr	Thr	Lys	1060	1065	1070
Thr	Thr	Tyr	Ser	Ser	Tyr	Thr	Glu	Asn	Lys	Glu	Glu	Lys	His	Lys	Lys	1075	1080	1085
Phe	Pro	Pro	His	Phe	Asn	Gln	Ser	Glu	Asn	Val	Pro	Ala	Tyr	Thr	Arg	1090	1095	1100
Ser	Arg	Gly	Ala	Asn	Asn	Gln	Val	Asp	Gln	Ser	Arg	Val	Ser	Ser	Asn	1105	1110	1115
Leu	Ser	Asn	Asn	Ser	Lys	Ala	Ser	Lys	Pro	His	Cys	Gln	Val	Asp	Asp	1125	1130	1135
Tyr	Asp	Asp	Asp	Lys	Thr	Thr	Asn	Phe	Ser	Glu	Arg	Tyr	Ser	Glu	Glu	1140	1145	1150
Glu	Gln	Gln	Glu	Asp	Glu	Thr	Glu	Arg	Gln	Asn	Lys	Tyr	Asn	Ile	Lys	1155	1160	1165
Ala	Tyr	Ala	Ser	Glu	Glu	His	His	Gly	Glu	Gln	Pro	Ile	Asp	Tyr	Ser	1170	1175	1180
Arg	Lys	Tyr	Ser	Thr	Asp	Val	Pro	Ser	Ser	Ala	Gln	Lys	Pro	Ser	Phe	1185	1190	1195
Pro	Tyr	Ser	Asn	Asn	Ser	Ser	Lys	Gln	Lys	Pro	Lys	Lys	Glu	Gln	Val	1205	1210	1215
Ser	Ser	Asn	Ser	Asn	Thr	Pro	Thr	Pro	Ser	Pro	Asn	Ser	Asn	Arg	Gln			

Asn Gln Leu His Pro Asn Ser Ala Gln Ser Arg Pro Gly Leu Asn Arg	1220	1225	1230
1235	1240	1245	
Pro Lys Gln Ile Pro Asn Lys Pro Pro Ser Ile Asn Gln Glu Thr Ile	1250	1255	1260
Gln Thr Tyr Cys Val Glu Asp Thr Pro Ile Cys Phe Ser Arg Gly Ser	1265	1270	1275
Ser Leu Ser Ser Leu Ser Ser Ala Glu Asp Glu Ile Glu Gly Arg Glu	1285	1290	1295
Arg Asn Ser Arg Gly Gln Glu Ser Asn Asn Thr Leu Gln Ile Thr Glu	1300	1305	1310
Pro Lys Glu Ile Ser Ala Val Ser Lys Asp Gly Ala Val Asn Glu Thr	1315	1320	1325
Arg Ser Ser Val His His Thr Arg Thr Lys Asn Asn Arg Leu Gln Thr	1330	1335	1340
Ser Asn Ile Ser Pro Ser Asp Ser Ser Arg His Lys Ser Val Glu Phe	1345	1350	1355
Ser Ser Gly Ala Lys Ser Pro Ser Lys Ser Gly Ala Gln Thr Pro Lys	1365	1370	1375
Ser Pro Pro Glu His Tyr Val Gln Glu Thr Pro Leu Met Phe Ser Arg	1380	1385	1390
Cys Thr Ser Gly Ser Ser Leu Asp Ser Phe Glu Ser His Ser Ile Ala	1395	1400	1405
Ser Ser Ile Ala Ser Ser Val Ala Ser Glu His Met Ile Ser Gly Ile	1410	1415	1420
Ile Ser Pro Ser Asp Leu Pro Asp Ser Pro Gly Gln Thr Met Pro Pro	1425	1430	1435
Ser Arg Ser Lys Thr Pro Pro Pro Pro Gln Thr Val Gln Ala Lys Lys	1445	1450	1455
Asp Gly Ser Lys Pro Ile Val Pro Asp Glu Glu Arg Gly Lys Val Ala	1460	1465	1470
Lys Thr Ala Val His Ser Ala Ile Gln Arg Val Gln Val Leu Gln Glu	1475	1480	1485
Ala Asp Thr Leu Leu His Phe Ala Thr Glu Ser Thr Pro Asp Gly Phe	1490	1495	1500
Ser Cys Ala Ser Ser Leu Ser Ala Leu Ser Leu Asp Glu Pro Tyr Ile	1505	1510	1515
Gln Lys Asp Val Gln Leu Lys Ile Met Pro Pro Val Leu Glu Asn Asp	1525	1530	1535
Gln Gly Asn Lys Ala Glu Pro Glu Lys Glu Phe Ile Asp Asn Lys Ala	1540	1545	1550
Lys Lys Glu Asp Lys Arg Ser Glu Gln Glu Lys Asp Met Leu Asp Asp	1555	1560	1565
Thr Asp Asp Asp Ile Asp Ile Leu Glu Glu Cys Ile Ile Ser Ala Met	1570	1575	1580
Pro Arg Lys Pro Ser Arg Lys Asn Lys Lys Val Pro Gln Pro Thr Pro	1585	1590	1595
Gly Lys Pro Pro Pro Pro Val Ala Arg Lys Pro Ser Gln Leu Pro Val	1605	1610	1615
Tyr Lys Leu Leu Ser Ser Gln Asn Arg Leu Gln Thr Gln Lys His Val	1620	1625	1630
Asn Phe Thr His Ser Asp Asp Met Pro Arg Val Tyr Cys Val Glu Gly	1635	1640	1645
Thr Pro Ile Asn Phe Ser Thr Ala Thr Ser Leu Ser Asp Leu Thr Ile	1650	1655	1660
Glu Ser Pro Pro Ser Glu Pro Thr Asn Asp Gln Pro Asn Thr Asp Ser	1665	1670	1675
Leu Ser Thr Asp Leu Glu Lys Arg Asp Thr Ile Pro Thr Glu Gly Arg	1685	1690	1695
Ser Thr Asp Asp Thr Asp Ala Ser Lys Pro Leu Asn Pro Thr Thr Val			

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Leu Asp Glu Asp Lys Ala Glu Glu Gly Asp Ile Leu Ala Glu Cys Ile		
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His Ser Ala Met Pro Lys Gly Lys Ser His Lys Pro Tyr Arg Val Lys		
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Lys Ile Met Asp Gln Ile Asn His Thr Ser Ala Ala Thr Ser Ser Gly		
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Asn Ser Arg Ser Met Gln Glu Thr Asp Lys Asn Lys Pro Thr Ser Pro		
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Val Lys Pro Met Pro Gln Ser Ile Gly Phe Lys Glu Arg Leu Lys Lys		
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Asn Thr Glu Leu Lys Leu Asn Pro Asn Ser Glu Asn Gln Tyr Cys Asp		
1795	1800	1805
Pro Arg Lys Pro Ser Ser Lys Lys Pro Ser Lys Val Ala Asn Glu Lys		
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Ile Pro Asn Asn Glu Glu Arg Thr Lys Gly Phe Ala Phe Asp Ser Pro		
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His His Tyr Thr Pro Ile Glu Gly Thr Pro Tyr Cys Phe Ser Arg Asn		
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Asp Ser Leu Ser Ser Leu Asp Phe Glu Asp Asp Asp Ile Asp Leu Ser		
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1985	1990	1995
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Asp Asp Leu Leu Gln Glu Cys Ile Ser Ser Ala Met Pro Lys Lys Arg		
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Val Gly Gly Ile Leu Ala Glu Glu Pro Asp Leu Thr Leu Asp Leu Arg		
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Asp Ile Gln Ser Pro Asp Ser Glu Asn Ala Phe Ser Pro Asp Ser Glu		
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Ser Pro Phe His Leu Thr Leu Asp Lys Glu Glu Lys Thr Ile Thr Ser		
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Asn Lys Gly Pro Lys Ile Leu Lys Pro Ala Glu Lys Ser Ala Leu Glu		
2165	2170	2175
Asn Lys Lys Thr Glu Glu Glu Pro Lys Gly Ile Lys Gly Gly Lys Lys		

Val	Tyr	Lys	Ser	Leu	Ile	Thr	Gly	Lys	Ser	Arg	Ser	Ser	Ser	Asp	Phe
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Ser	Ser	Arg	Ala	Asp	Ser	Pro	Pro	Arg	Ser	Gln	Thr	Gln	Thr	Pro	Ala
Leu	Ser	Pro	Ser	Leu	Pro	Asp	Met	Ala	Leu	Ser	Thr	His	Ser	Ile	Gln
Ala	Gly	Gly	Trp	Arg	Lys	Met	Pro	Pro	Asn	Leu	Asn	Pro	Ala	Ala	Glu
His	Gly	Asp	Ser	Arg	Arg	Arg	His	Asp	Ile	Ser	Arg	Ser	His	Ser	Glu
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Thr	Gly	Ser	Ser	Ser	Ser	Ile	Leu	Ser	Ala	Ser	Ser	Glu	Ser	Ser	Glu
Lys	Ala	Lys	Ser	Glu	Asp	Glu	Lys	Gln	Gln	Val	Cys	Ser	Phe	Pro	Gly
Pro	Arg	Ser	Glu	Cys	Ser	Ser	Ser	Ala	Lys	Gly	Thr	Trp	Arg	Lys	Ile
Lys	Glu	Ser	Glu	Ile	Leu	Glu	Thr	Pro	Ser	Asn	Gly	Ser	Ser	Ser	Thr
Ile	Ala	Glu	Ser	Asn	Cys	Ser	Leu	Glu	Ser	Lys	Thr	Leu	Val	Tyr	Gln
Met	Ala	Pro	Ala	Val	Ser	Lys	Thr	Glu	Asp	Val	Trp	Val	Arg	Ile	Glu
Asp	Cys	Pro	Ile	Asn	Asn	Pro	Arg	Ser	Gly	Arg	Ser	Pro	Thr	Gly	Asn

Ser Pro Pro Val Ile Asp Asn Val Leu Asp Gln Gly Gln Lys Glu Glu
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 Ala Ala Lys Asp Cys His Thr Arg His Asn Ser Gly Asn Gly Asn Val
 2690 2695 2700
 Pro Leu Leu Glu Asn Arg Gln Lys Ser Phe Ile Lys Val Asp Gly Leu
 2705 2710 2715 2720
 Asp Thr Lys Gly Thr Asp Pro Lys Ser Leu Ile Asn Asn Gln Gln Glu
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 Thr Asn Glu Asn Thr Val Ala Glu Arg Thr Ala Phe Ser Ser Ser Ser
 2740 2745 2750
 Ser Ser Lys His Ser Ser Pro Ser Gly Thr Val Ala Ala Arg Val Thr
 2755 2760 2765
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 2770 2775 2780
 Thr Ser Arg Pro Ser Gln Ile Pro Thr Pro Val Thr Asn Ser Thr Lys
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